

# 1.0 Purpose and Need

## 1.1 Introduction

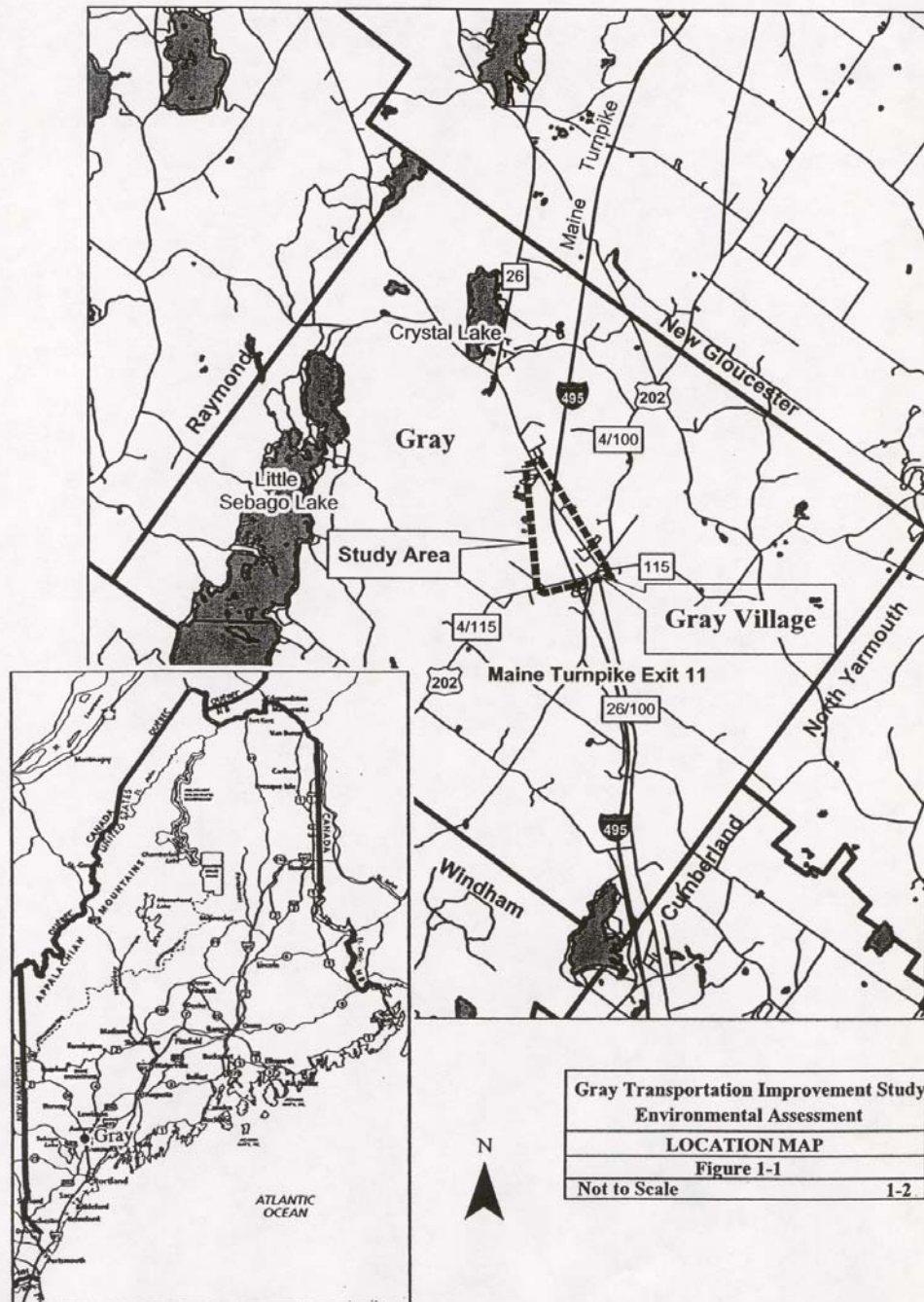
The Federal Highway Administration (FHWA) and the Maine Department of Transportation (MDOT) propose to improve travel conditions on segments of State Route 26 and to improve accessibility to the Maine Turnpike Exit 11 in the Town of Gray, Cumberland County, Maine. Specifically, traffic congestion and mobility deficiencies exist at two intersections along State Route 26 (Route 26): the intersection of Route 26 with State Route 4 (Route 4), State Route 100 (Route 100), State Route 115 (Route 115) and U.S. Route 202 (Route 202); and the intersection of Route 26 with Route 4, Route 100, Route 202, and Brown Street; these intersections collectively are also known as Gray Village. Traffic conditions in Gray Village are influenced by the proximity to Exit 11 of the Maine Turnpike, which is designated Interstate Route 495 (I-495) in this area. Route 26 and the Maine Turnpike are federally listed routes in the National Highway System (NHS). Improvements considered in this area include upgrading the existing roads, constructing a bypass around Gray Village, and improving signalization within these intersections.

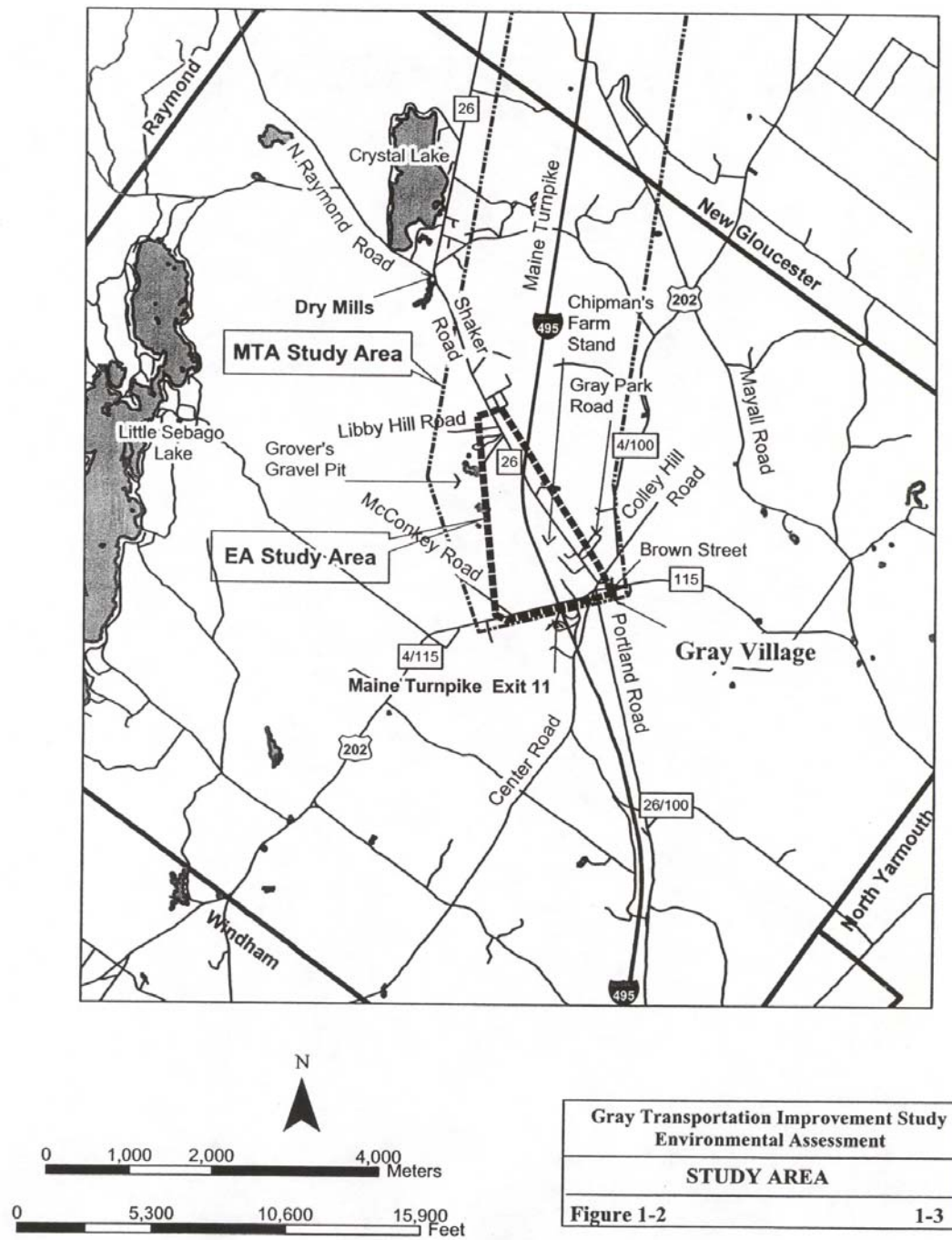
The Town of Gray is located approximately 24 kilometers (15 miles) north of Portland, Maine, Cumberland County, and is part of the Greater Portland Metropolitan Statistical Area (MSA) (Figure 1-1, page 1-2). The Study Area, as depicted in Figure 1-2, (page 1-3) is located in the middle of Gray, and encompasses approximately 7.7 square km (3 square miles). The Study Area is described as follows: Routes 4/115/202 from McConkey Road to the west proceeding east to the Maine Turnpike Authority (MTA) Exit 11 at its intersection with Routes 4/115/202. The Study Area proceeds east and includes Gray Village. The Study Area proceeds north from Gray Village to the Route 26 overpass of the Maine Turnpike. Route 26, at Libby Hill Road, is the northern boundary. The western boundary of the Study Area extends from Libby Hill Road to the north, to McConkey Road to the south.

The Study Area for this Environmental Assessment, as described above, is a subset of a larger Study Area considered by the Maine Turnpike Authority in the Maine Turnpike, Gray/New Gloucester Access Study, Final Location Study Report, January 1999, (MTA Study). This latter report is described in Section 1.2.

## 1.2 Study History

As authorized by the State Legislature and at the request of area communities, the MTA, in conjunction with the MDOT, completed a report entitled Maine Turnpike, Gray/New Gloucester Access Study, Final Location Study Report, January 1999 to determine the value and feasibility of providing improved access to the Maine Turnpike in the Gray/New Gloucester region. Begun in 1995, the overall intent and purpose of the MTA Study had been to explore ways to improve access to the Maine Turnpike for these communities and to help alleviate congestion in Gray Village and along portions of Route 26 northwest of Gray Village.





A total of 27 alternatives (including the No-Build and System Upgrade Alternatives) were studied in the Maine Turnpike corridor between Exit 11, Gray and Exit 12, Auburn. Two levels of screening have been performed on these initial alternatives using such measures of effectiveness as improvements in traffic service, environmental consequences, socioeconomic and land use implications, and engineering criteria. The end result of two years of study was a list of seven final alternatives (including the No Build and System Upgrade Alternatives) mutually accepted by the towns, Public Advisory Committee (PAC), MTA and MDOT.

During the summer of 1998, the PAC and Town of Gray selected the Westerly Bypass with Southern Connector-2 Alternative as their locally-preferred alternative. The MTA and MDOT developed modifications to this locally-preferred alternative to reduce environmental impacts while maintaining a high level of transportation benefit. An eighth alternative, known as the Westerly Bypass Only Alternative, was developed as a result of these modifications. The results of the MTA Study are documented in the Maine Turnpike, Gray/New Gloucester Access Study, Final Location Study Report, January 1999.

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## 1.3 Study Purpose

The NEPA Study Purpose is to relieve congestion for local and through traffic traveling through Gray Village and along Route 26 in Gray, while improving accessibility to and from the Maine Turnpike and increasing corridor capacity within the Maine Turnpike corridor between Exit 11, Gray and Exit 12, Auburn. Improvements will accommodate current and future traffic in a safe and efficient manner that is sensitive to the character of these areas.

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## 1.4 Study Needs

Traffic congestion is evident in Gray Village during afternoon peak commuting periods and during peak periods of travel to recreational destinations north of the Study Area along Route 26. Under existing (year 2000) PM peak hour traffic volumes, both signalized intersections in Gray Village operate at level of service (LOS) E or F, indicating traffic volumes approach or exceed available capacity. Average vehicle stopped delays range from 53 to 102 seconds per vehicle. Congestion in Gray Village is further exacerbated by congestion at the intersection of Routes 4/115/202 with the Maine Turnpike Exit 11 interchange, where PM peak hour level of service is LOS E. In addition to these intersections, two segments of Route 26, one north of Gray Village and one south of Libby Hill Road operate at LOS E during the PM peak hour.

Another intersection in the Study Area that operates poorly is the intersection of Route 26 and Libby Hill Road. Level of service at this intersection during the AM peak hour for traffic entering the intersection on Libby Hill Road is LOS E. This intersection is controlled by STOP signs on Libby Hill Road, and congestion and delays occur due to insufficient gaps in traffic flow along Route 26. Libby Hill Road is the only access road to the Gray/New Gloucester Middle and High Schools.

There are five designated High Crash Locations (HCL) in the Study Area. Both Gray Village intersections are HCLs, as is the intersection of Routes 4/115/202 with Maine Turnpike Exit 11. The segment of Routes 4/115/202 between McConkey Road and Maine Turnpike Exit 11 also is an HCL, as is the segment of Route 26 between Gray Village and Gray Park Road. Routes 26/100, south of Gray Village at the edge of the Study Area, also is an HCL.

Forecasted growth in traffic (See Section 3.2, page 3-1) will further exacerbate congestion in the Study Area. Under design year (2025) traffic volumes, peak hour congestion will worsen to LOS F at both signalized intersections in Gray Village. Average vehicle stopped delay will nearly double to 3.36 minutes per vehicle at the two Gray Village intersections of Route 26 with Routes 4/100/115/202. Congestion at the intersection of Routes 4/115/202 and the Maine Turnpike Exit 11 interchange will further degrade to LOS F, and average vehicle stopped delay is projected to exceed six minutes. Delays exiting Libby Hill Road onto Route 26 will exceed two minutes per vehicle and level of service will degrade to LOS F. Route 26 north of Gray Village will operate at LOS F, and its volume-to-capacity (v/c) ratio will exceed 1.0, indicating that the projected traffic volume will exceed the capacity of the road. Levels of service on other Study Area roads will deteriorate to LOS E including: Routes 26/100 south of Gray Village, Routes 4/100/202 north of Gray Village, and Routes 4/115/202 west of Exit 11.

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## 1.5 Other Environmental Assessments that Pertain to this Study

In 1998, an Environmental Assessment entitled Route 26-New Gloucester to Poland Final Environmental Assessment and Final Section 4(f) Statement was prepared as part of a study to improve a deficient portion of State Route 26 from New Gloucester to Poland, Maine. This prior study has evaluated a wide range of alternatives to increase corridor capacity, manage travel demand, and develop effective alternative routes. The Study Area for this Environmental Assessment encompasses State Route 26, beginning approximately 11 km (7 miles) north of Gray Village. On November 24, 1998, the FHWA issued a Finding of No Significant Impact (FONSI) for a Preferred Alternative. The Route 26-New Gloucester to Poland project is currently under construction.

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## 1.6 Scope of this Environmental Analysis

The scope of the Gray Transportation Improvement Study is to identify a Preferred Alternative that would alleviate congestion in Gray Village and along Route 26 northwest of Gray Village in a manner that is sensitive to the character of the community. This EA utilizes the findings as documented in the Maine Turnpike, Gray/New Gloucester Access Study, Final Location Study Report, January 1999. The MTA Study recommended an alternative known as the Westerly Bypass Only Alternative as a cost-effective, minimal impact alternative to address the transportation needs in the Study Area. Therefore, the scope of this environmental analysis focuses on updating, where appropriate, data from the MTA Study for the Westerly Bypass Only Alternative. The No-Build and Upgrade Alternatives are also evaluated as part of this Environmental Assessment. The effectiveness of Transportation Demand Management/Transportation Systems Management (TDM/TSM) measures, as documented in other regional studies (Portland Area Comprehensive Transportation Committee, 2001; Maine Turnpike Authority, 1997), is included in this Environmental Assessment to document the requirements of the

Maine Sensible Transportation Policy Act (STPA). Traffic data from the MTA Study has been updated to identify changes in traffic patterns that have occurred since the MTA Study was completed.

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## 1.7 Decision To Be Made

This Environmental Assessment provides the FHWA and MDOT with the decision-making tool to identify the Preferred Alternative that best addresses the basic Study Purpose and Need, with the least adverse impacts on social, economic, and natural resources.

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## 1.8 Applicable Regulations and Required Coordination

The following are the current federal laws and policies that apply to the proposed action.

- National Environmental Policy Act of 1969 (NEPA), as amended. Regulations found in 40 CFR 1500-1508, and as regulated by USDOT-FHWA in 23 CFR 771.117-771.121
- Sections 401 and 404 of the Clean Water Act, as regulated by the US Army Corps of Engineers through 33 USC 1251-1376.
- Section 6(f) of the Land and Water Conservation Fund Act of 1965, 16 USC 460
- Section 106 of the National Historic Preservation Act of 1966
- Section 4(f) of the U.S. Department of Transportation Act, of 1966, as regulated in 23 CFR 771.135
- Endangered Species Act, as regulated in 50 CFR 17 et seq.
- Executive Order 11990, Protection of Wetlands, May 24, 1977
- Executive Order 11988, Protection of Floodplains, May 24, 1977
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, February 11, 1994
- U.S. Department of Agriculture, Farmland Protection Policy Act (FPPA) of 1984 (7 CFR 658)
- U.S. Department of Transportation Order on Environmental Justice (USDOT Order 5610.2), 1997
- Federal Highway Administration Technical Advisory TA6640.8A (October 30, 1987)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601 et seq.)
- U.S. Environmental Protection Agency, National Pollutant Discharge Elimination System (33 USC 1342)

The following are the current state laws and policies that apply to the proposed action.

- Maine Endangered Species Act, 12 MRSA Chapter V
- Maine Department of Environmental Protection, Natural Resources Protection Act, 38 MRSA §480-A et seq.
- Maine Department of Environmental Protection, Solid Waste Management Law, 38 MRSA §1301
- Maine Sensible Transportation Policy Act, 23 MRSA § 73, 1992

- Maine Department of Transportation/Maine Department of Environmental Protection Stormwater Memorandum of Agreement, MRSA § 420-D.

Table 1-1 lists the state and federal permits and certifications expected to be required prior to the construction of the Preferred Alternative.

**Table 1-1**  
**Environmental Permits Expected to be Required for the Preferred Alternative**

<b>Agency</b>	<b>Permit</b>	<b>Status</b>
MDEP	NRPA Permit	Application not yet filed
MDEP	Stormwater Permit	Application not yet filed
MDEP	Section 401 Water Quality Certification (issued with NRPA)	Application not yet filed
ACOE	Section 404, Individual Permit	Application not yet filed
EPA	NPDES Construction Permit	Application not yet filed

Coordination with regulatory and resource agencies occurred throughout the study. Coordination letters were mailed to 27 federal, state, regional, and local agencies in accordance with the procedural provisions of NEPA and FHWA. The Study Area Map and study description were mailed to these agencies in January, 2001 to notify them of the proposed study and to request specific information. Responses are noted at the back of this report.

During the MTA Study, the U.S. Army Corps of Engineers (ACOE) as part of their New England Division Highway Methodology determined their basic project purpose is to relieve congestion for local and through traffic (autos and trucks) traveling through Gray Village and along Route 26 in Gray while improving accessibility to and from the Maine Turnpike. Improvements will accommodate current and future traffic in a safe and efficient manner that is sensitive to the character of these areas.

Since the beginning of the MTA Study in November of 1995, there have been 15 PAC meetings and three public informational meetings. During the course of preparing this EA, coordination occurred with Town of Gray staff, elected officials, and the Town's appointed transportation committee.